

## **REMARKS**

Claims 1-25 are pending in the application. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesecher (U.S. Patent 6,115,406) in view of Kuwahara et al. (U.S. Patent 6,597,406). Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesecher in view of Kuwahara and further in view of the admitted prior art (APA). Claims 3 and 23 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Specification and Drawings are also objected to. It is gratefully acknowledged that Claims 4-20 and 24-25 have been allowed.

Claims 4 and 24 are amended as set forth herein.

In the Drawings, FIG. 5, step 513, "DSCH" is amended to "PDSCH" as referred to on page 23, line 27. In FIG. 9, "DSCH/E-DSCH" in steps 913, 919 and 921 is amended to "PDSCH/E-PDSCH" as referred to on page 28, line 5. FIG. 6 is also be amended to change the reference character for the "A/D" from "705" to "704".

In the Specification, on page 6, line 21 "UL-DPCH" is changed to "UL-DPCCH" as shown in Fig. 3; on page 12, line 5, "UL-DPCH" is changed to "UL-DPCCH" as shown in Fig. 4A; and on page 13, lines 19 and 22, "UL-DPCH" is be changed to "UL-DPCCH".

With respect to independent Claims 1 and 21, the Examiner asserts that Mesecher teaches a first spreader for spreading first data and outputting a first spread signal (Fig. 4 element 74, col. 3, lines 43-45) and a second spreader for spreading second data and outputting a second spread signal (Fig. 4 element 76, col. 3, lines 43-45). The Examiner also asserts that Mesecher teaches a first (second, third, fourth) multiplier for multiplying a first (second, third, fourth) weight for a first (second, first, second) antenna by the first (first, second, second) spread signal output from the first (first, second, second) spreader, and outputting a first (second, third, fourth) weighted spread signal.

However, Mesecher teaches that elements 74 and 76 of Fig. 4 are data generators, which generate DATA SIGNAL 1 and DATA SIGNAL 2. Elements 360 and 362 are mixers that generate the spread signals using random chip code sequences. “Each spread data signal is generated by mixing at mixers 360-376 a corresponding data signal from generators 74-78 with differing pseudo random chip code sequences  $D_{11}$ - $D_{NM}$ .” (Col. 3, lines 41-44) Consequently, while Mesecher does teach spreaders, it does not teach a first, second, third or fourth multiplier.

The Examiner acknowledges that Mesecher does not expressly disclose a weight generator for determining the first to fourth weights from feedback information received from a User Equipment. The Examiner asserts that Kuwahara discloses a weight generator (Fig. 2 element 105, col. 6 lines 21-23) for determining the first to fourth weights from feedback information receiver from a User Equipment (Fig. 2 element 104, col. 6 lines 19-21) and providing the determined first to fourth weights to the first to fourth multipliers (Fig. 2 element 113, col. 6 lines 23-25). Further the Examiner maintains that it would be obvious to apply the Kuwahara teaching of weighting signals to Mesecher.

However, as shown on Fig. 2 of Kuwahara, the control signal provided to the multiplier 113 from the Tx power control 105, is only one weighted signal, not four weighted signals. As evidence of the single weighting, the Tx control power signal is not detailed as an array comparable to the “uplink array weight” (col. 4, lines 65-66), or “downlink array weight” (col. 8., lines 33-38).

Therefore, Mesecher in view of Kuwahara, fails to teach first to fourth weights provided to the first to fourth multiplier.

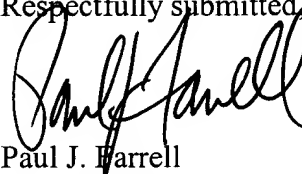
Further, with respect to independent Claims 1 and 21, Mesecher discloses transmitting a spread signal through each antenna to identify signals per antenna. Kuwahara does not consider respective weights of transmitting antennas, but considers the weight for one mobile station. Mesecher and Kuwahara, however, do not teach or suggest applying weight to each of a plurality of antennas, as disclosed in the present application. Therefore, Claims 1 and 21 are also not

obvious from the combination of Mesecher and Kuwahara.

Consequently, Mesecher in view of Kuwahara does not teach each and every element of Claims 1 and 21. Therefore, independent Claims 1 and 21 should be in condition for allowance. While not conceding the patentability per se of dependent Claims 2, 3, 22 and 23, these claims should also be in condition for allowance for at least the above reasons.

Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



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